



# THE HANFORD SITE

## Direct-Feed Low-Activity Waste Program Update

Tom Fletcher

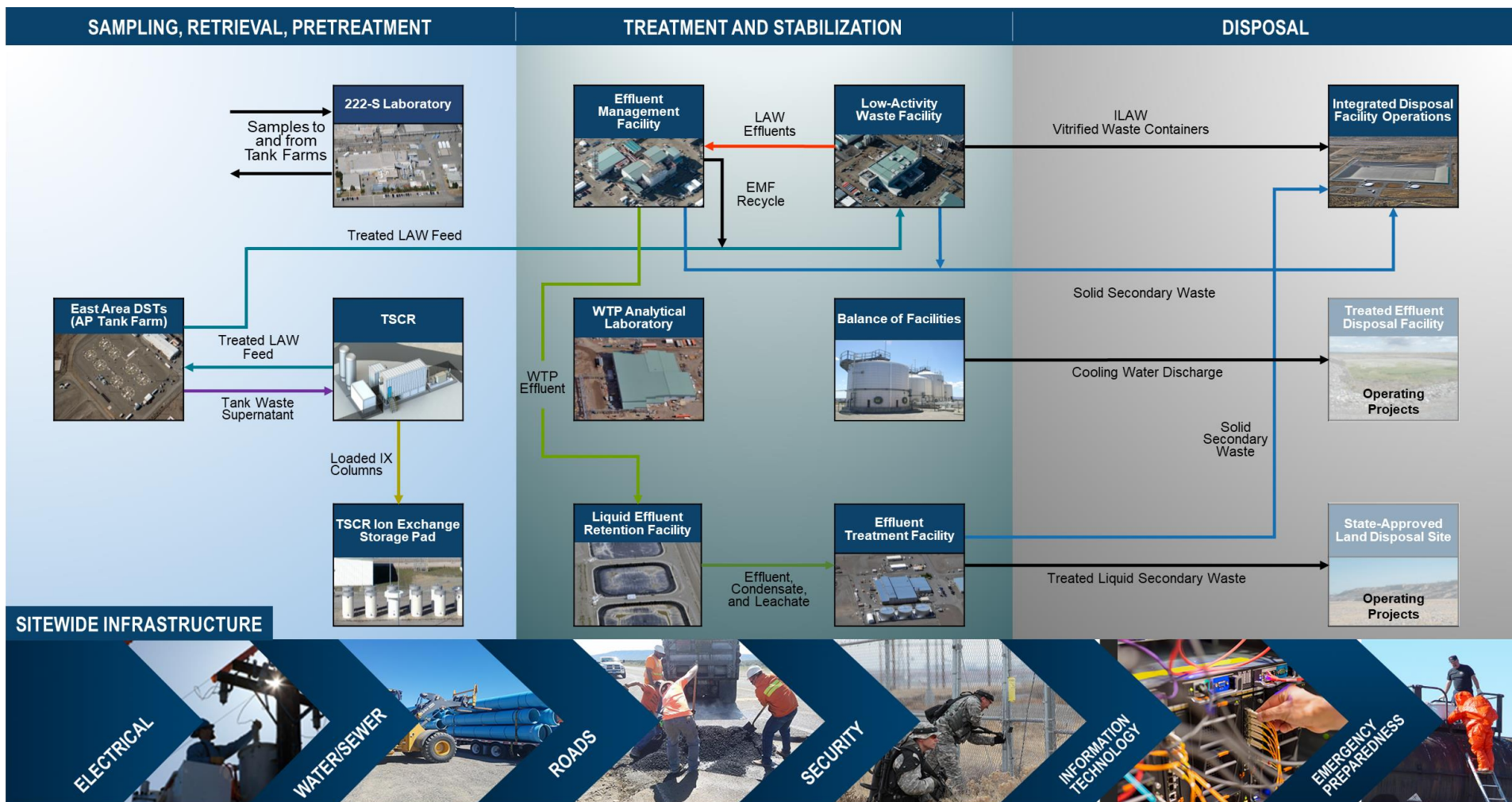
Assistant Manager for the Waste Treatment and  
Immobilization Plant Project

*June 9, 2021*

## Management engagement and time in field

- Maintaining operational awareness is a priority
- Line managers are in close contact with the front-line employees
- Line managers listen and act on real-time operational information
- Line managers identify critical performance elements and monitor them closely

- What is the purpose of the briefing?
  - Update on the scope of the DFLAW Program as integrated systems and components transition through startup and preparation for operations
- Related HAB Work Plan issue
  - Transition all Low-Activity Waste (LAW) Facility, Analytical Laboratory, and Balance of Facilities systems to commissioning



DST = double-shell tank  
 EMF = Effluent Management Facility  
 ILAW = immobilized low-activity waste  
 IX = ion exchange

LAW = low-activity waste  
 TSCR = tank-side cesium removal  
 WTP = Waste Treatment and Immobilization Plant



U.S. DEPARTMENT OF  
**ENERGY**



# Waste Treatment and Immobilization Plant Big Picture



February 2021

Low-Activity Waste Facility



May 2021

Effluent Management Facility C5 Floor Coating Complete



January 2021

Ecology, Touring Analytical Laboratory



April 2021

Effluent Management Facility Vessels



# Waste Treatment and Immobilization Plant Big Picture (cont.)



March 2021

Maintenance on Completed Systems



April 2021

Mechanical Handling System Crane Load Test



March 2021

Effluent Management Facility Handover Completed



April 2021

Simulator Team Training for Plant Management Control Room



# Tank Farms Project Big Picture



February 2021

Tank-Side Cesium Removal (TSCR) Ion Exchange Columns (IXC) Restraints and Pad



February 2021

TSCR IXCs and Filters Installed and Prepared for Operational Acceptance Test



March 2021

TSCR Feed Pump Installation



March 2021

TSCR Transfer Lines Backfilled to WTP Connection Point



# Tank Farms Project Big Picture (cont.)



March 2021

ETF Ultraviolet/Oxidative (UV/OX) Concrete Pad Removal



April 2021

New ETF UV/OX Units Being Received



March 2021

LERF Basin 44 Cover Cleaning Waste



April 2021

LERF Basin 44 Cover Clean





February 2021

200 West Area Potable Water Tank Replacement Pumps Delivered



March 2021

Electrical Infrastructure Upgrades To Provide More Power



March 2021

Pump Delivery for Raw Water System Upgrade



April 2021

Improving Service on 7th Street with New Electrical Boxes

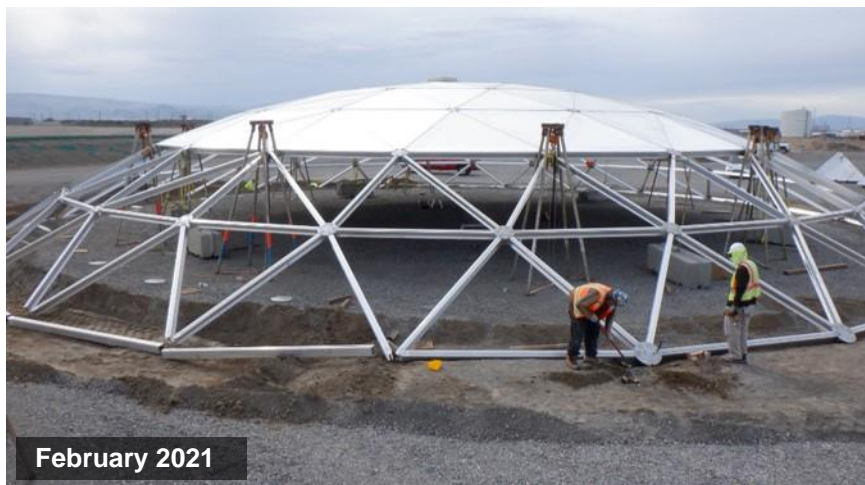
# Integrated Disposal Facility Big Picture



Integrated Disposal Facility Aerial View



Leachate System Column Install



Leachate Collection Tank Dome Construction

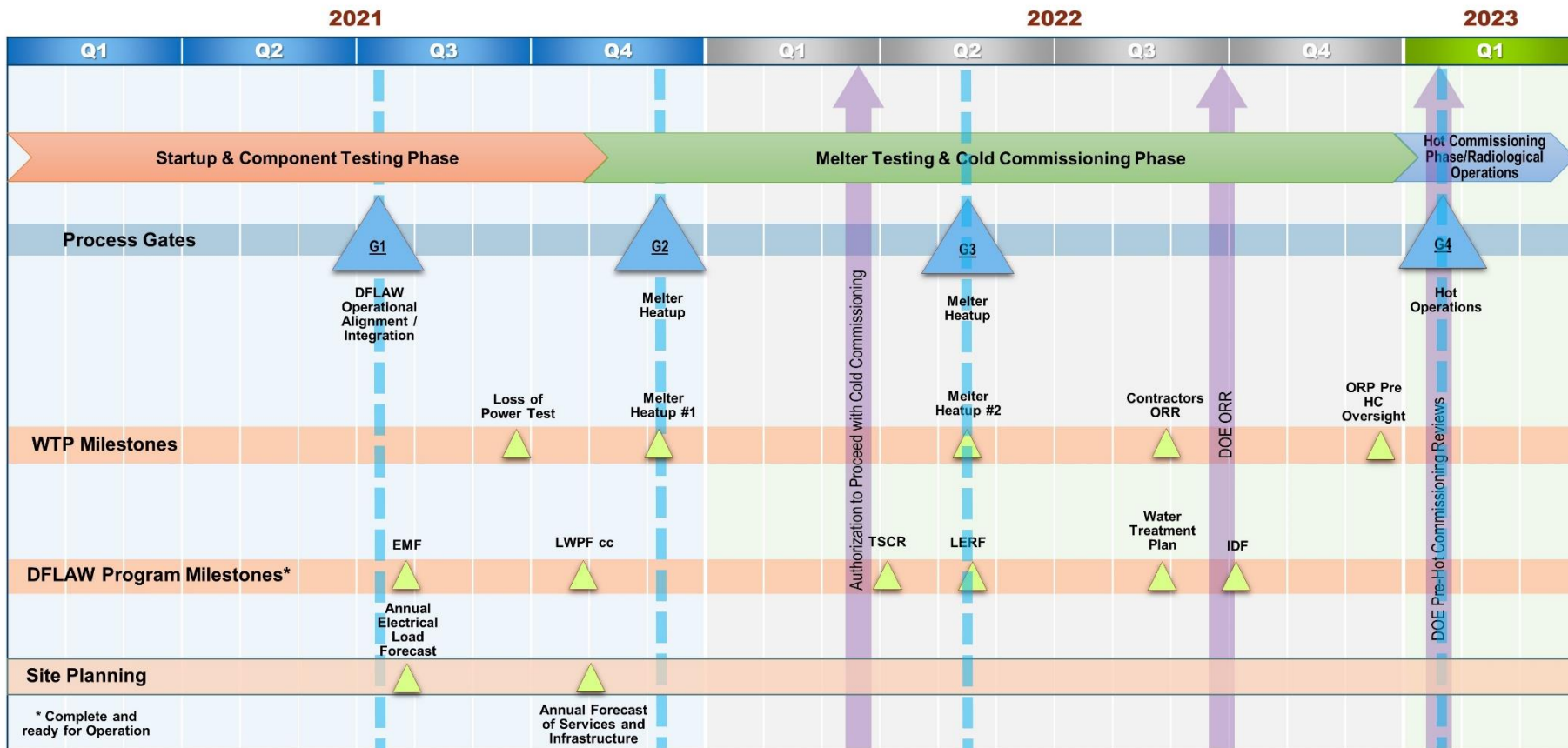


Lights in Immobilized Low-Activity Waste Receiving Area



# Phase-Gate Process: One Hanford Validation

## DFLAW Phase Gate Process



Based on Integrated Schedule December 2020

- DFLAW Program fitness
  - DFLAW projects advancing as planned – visible progress and positive momentum
  - WTP dangerous waste and air permitting on track
- Operational focus
  - DFLAW feed qualification sample and glass formulation nearing completion
  - Operational emphasis; preparations for 24/7 Hanford Site operations
  - DFLAW Program Phase-Gate Process – One Hanford validation